UNPUBLISHED
SURVEY & CONTROL
REPORTS

INTERMOUNTAIN STATION
Central Reference File
No. 3.4153.11

Nov. 28, 1960

REPORT ON PORTLAND AREA SURVEY FOR THE EUROPEAN PINE SHOOT MOTH, SEASON OF 1960

By
William H. Klein

PACIFIC NORTHWEST FOREST AND
RANGE EXPERIMENT STATION
DIVISION OF FOREST INSECT RESEARCH
POST OFFICE BOX 4059
PORTLAND 8, OREGON

Introduction

A special survey for the European pine shoot moth in the Portland area started on August 23 and was terminated in mid-October. This was one of nearly 200 community surveys conducted cooperatively in Oregon and Washington during 1960 to detect the shoot moth.

Portland and its neighboring communities comprise the largest and fastest growing residential area in the state. This rapid growth, coupled with the modern trend toward oriental landscaping, has resulted in extensive plantings of pine in and around Portland. Consequently this is an area very subject to establishment of the shoot moth. Most of the pine stock comes from local nurseries which also are the primary source of ornamental pines for the entire state. Much of the pine is grown locally from seed, but some comes from outside the state, chiefly from Washington.

Prior to the cooperative survey, no evidence of the shoot moth has been found in Oregon. During the spring of 1960, P. W. Orr and the author examined the principal forest tree nurseries in Oregon and Washington. During that survey 6 ornamental nurseries in Portland, 1 in Corbett, and the Hoyt Arboretum were inspected and no shoot moth was found. In addition, nursery inspectors of the Oregon Department of Agriculture examined 44 Portland nurseries and retail sales outlets, finding only 4 suspicious specimens, none of which proved to be the shoot moth.

Organization of Cooperative Survey

The Portland area survey was organized, planned, and directed by the author. Cooperators were enlisted through sponsorship of the Northwest Forest Pest Action Council. Excellent cooperation was obtained from all personnel who contributed both time and effort to the survey. Eleven men participated: seven foresters, one nursery inspector, one entomologist, and two college students.

A working map covering greater Portland, its suburbs, and the outlying communities of Beaverton, Tigard, Oswego, Milwaukie, Oak Grove, Fairview, Gresham, and Troutdale was prepared (See reduced copy which is attached). The total area was divided into 13 units, each of which was carefully delineated to prevent duplication of survey efforts. Each unit was analyzed on the basis of its location, size, extent, and type of residential development and survey time was scheduled accordingly.

A special training session was held in Portland on August 23 for all survey participants to familiarize them with the shoot moth and its damage, and to assign definite areas of responsibility. Each cooperator was given a folder which contained the following material:

FILE COPY
MISSOULA
FOREST INSECT
LABORATORY

1. Individual map of assigned unit.
2. List of Portland Nurseries previously inspected.
3. Survey instructions.
4. Collection and summary forms.
5. Survey guide.

Emphasis was placed on the inspection of pine plantings in the newer residential areas, around parks and public buildings, and in nurseries and retail outlets not previously inspected. Each participant was asked to complete his portion of the survey as soon as practicable, and to report his findings not later than September 30.

Survey Intensity

Considering all operational aspects of the survey it was decided that 38 man-days should suffice for adequate coverage of the area involved. A total of 40 man-days actually was spent on the survey, ranging from 1-1/2 days in the older residential units with few pine and up to 4 days in the newer areas where ornamental plantings of pine were abundant.

Findings

A total of 32 collections was received and processed in the laboratory of the PNW Forest and Range Experiment Station. Only 1 contained the European pine shoot moth and that was collected on September 6th by Richard Browne and the author on Scotch pine in a Portland nursery. This finding prompted an intensive inspection of all ornamental pines in the vicinity of the nursery, but no other infestation was found. This area will be looked at intensively again next spring when damage will be more easily found, if present.

Comments on the Survey

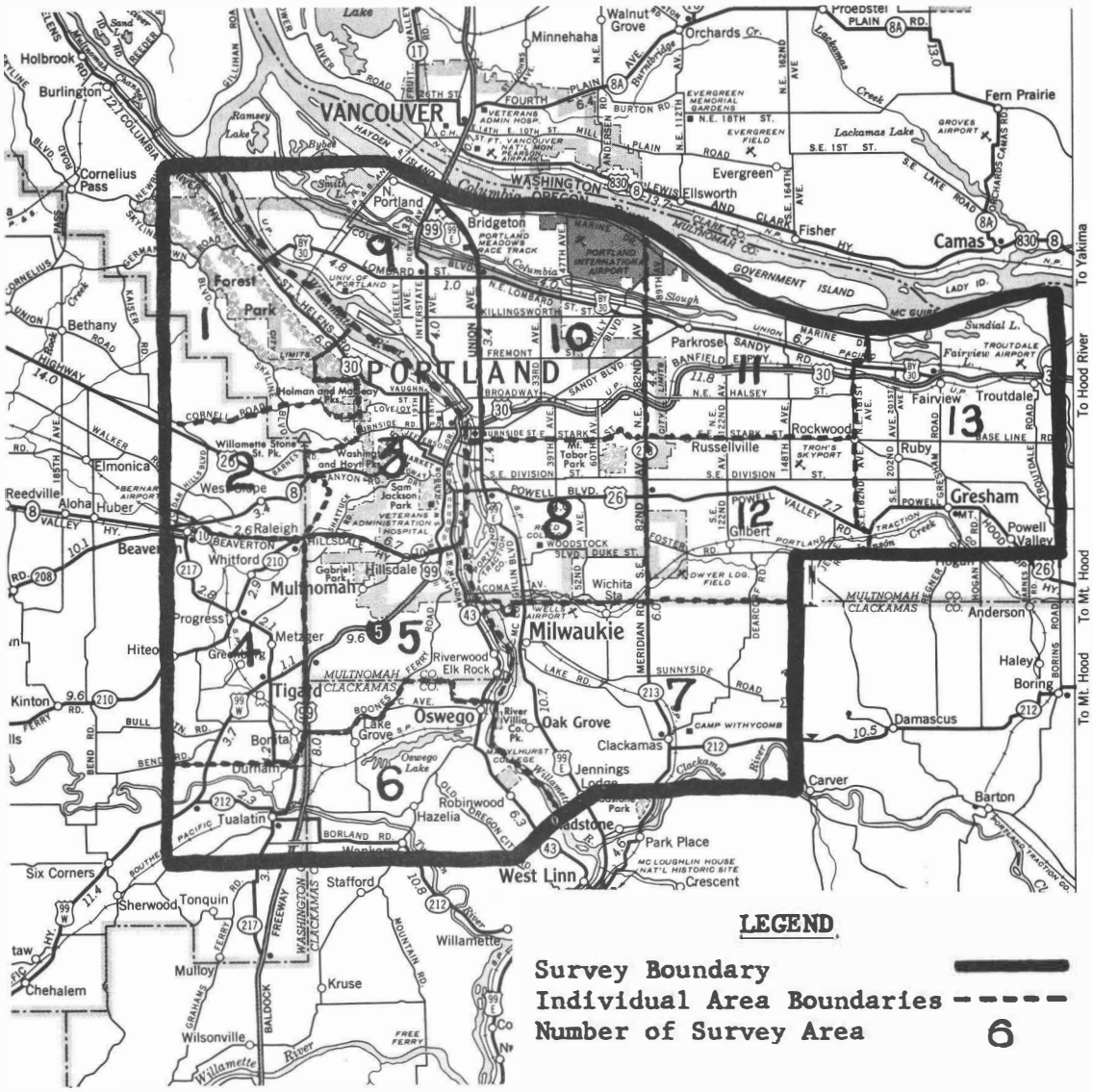
Most of the cooperators submitted written reports; some reported verbally. Other than the foliage samples sent in for identification, no other infestations were found or suspected. Some cooperators said they had ample time and felt they covered their unit adequately; others felt that there was too much to look at in the time available. All agreed that the greatest hazard was concentrated in the newer residential areas, particularly those where landscape terracing is prevalent. Subsequent surveys should be concentrated in these areas.

Other than the allotment of more time, no suggestions were made regarding the improvement of this type of survey.

SUMMARY OF SURVEY CONTRIBUTIONS

Unit	Man-days contributed	Name of individual	Agency represented	Date assigned	Date completed
1	3	Howard Stevens	BLM	Aug.23	Sept.27
2	3	Howard Stevens	BLM	Aug.23	Sept.27
3	4	Gene Fagerness	Exp. Sta.	Aug.31	Sept. 5
4	3-1/2	Ken Palen	OSBF	Aug.23	Sept.15
5	6	Dick Browne	Exp. Sta.	Aug.31	Sept. 9
6	4	Bill Nautel	USFS	Aug.23	Sept.15
7	3	Al Parker	OSBF	Aug.23	Sept.30
8	2	Barney Douglas	USFS	Aug.23	Sept. 9
9	1-1/2	Jim Johnston	Crown Zell.	Aug.26	Oct. 14
10	2	Ben Howard	USFS	Aug.23	Sept.13
11	3	Hans Nicolaison	State Dept. of Agric.	Aug.23	Sept.12
12	3	Pete Larson	State Dept. of Agric.	Aug.23	Sept.12
13	2	Bill Nautel	USFS	Aug.23	Sept.15
Total	40				

MAP OF PORTLAND AREA PINE SHOOT MOTH SURVEY
SHOWING AREAS OF RESPONSIBILITY



FOREST SERVICE
INTERMOUNTAIN
RECEIVED
JAN 12'61
FOREST INSECT LAB.
MISSOULA, MONT.